

WHAT IS CLAIMED IS:

1. An automated imaging system comprising:

an illumination source;

a phosphorescent imaging target; and

an optical imaging sensor for receiving luminance information emitted from said

5 phosphorescent imaging target.

2. The automated imaging system of claim 1 further comprising:

a processor for analyzing said luminance information.

3. The automated imaging system of claim 1 wherein said illumination source

moves in relation to said phosphorescent imaging target.

4. The automated imaging system of claim 1 wherein said phosphorescent

imaging target is movable in relation to said illumination source.

5. The automated imaging system of claim 1 wherein said phosphorescent

imaging target is affixed to an object.

6. The automated imaging system of claim 5 wherein said received luminance

information determines a position of said object.

7. The automated imaging system of claim 5 wherein said received luminance

information determines an alignment of said object with another object.

8. The automated imaging system of claim 5 wherein said received luminance

information determines a presence of said object.

9. The method of automatically imaging an object comprising the steps of:  
radiating photonic illumination onto said object;  
scanning said object;  
re-radiating a portion of said radiated photonic illumination from a phosphorescent  
5 target on said object; and  
receiving said re-radiated photonic illumination.

10. The method of claim 9 wherein said scanning step comprises the step of:  
sweeping said photonic illumination across said object.

11. The method of claim 9 wherein said scanning step comprises the step of:  
moving said object underneath said radiated photonic illumination.

12. The method of claim 9 wherein said receiving step comprises the steps of:  
optically sensing said re-radiated photonic illumination.

13. The method of claim 9 further comprising the step of:  
determining a positional orientation responsive to said received re-radiated photonic  
illumination.

14. The method of claim 13 further comprising the step of:  
aligning said object with another object responsive to said determined positional  
orientation.

15. The method of claim 9 further comprising the step of:  
incrementing a counter for detecting a number said objects responsive to said received  
re-radiated photonic illumination.

008844-062101

16. An imaging system for optoelectrically detecting a presence of an object, said imaging system comprising:

means for illuminating a region of space;

means for providing a phosphorescent indicium on said object; and

means for detecting light energy re-radiated from said phosphorescent mark.

17. The imaging system of claim 16 further comprising:

means for processing presence information responsive to said detected light energy.

18. The imaging system of claim 17 further comprising:

means for determining a positional orientation responsive to said processed presence information.

19. The imaging system of claim 18 further comprising:

means for aligning said object with another object responsive to said determined positional orientation.